

REMARKS

Claims 2-20, 23, 25-26 and 28 are pending in this application, of which claims 2-20, 23, 25 and 28 have been amended. No new claims have been added. Claims 21, 22 and 24 have been canceled.

Claims 2-21, 23-26 and 28 stand rejected under 35 USC §103(a) as unpatentable over **JP '536** (previously applied) in view of **Pletscher** (previously applied).

Applicants respectfully traverse this rejection.

As noted in Applicants' response of September 14, 2004, **JP '536** discloses an omnidirectional simultaneous vapor-deposition polymerizer, including a chamber 1 connected through valves 18a, 18b to monomer vessels 5a, 5b. A material to be deposited is placed in a barrel 10 in the chamber 1, and, for example, 4,4'-diaminodiphenyl ether is filled in one couple of the monomer vessels 5a and 5b and pyromellitic dianhydride in another couple of the monomer vessels. The barrel 10 is rotated with a motor 11, the chamber is evacuated to a specified pressure with an exhaust pipe 2, the chamber 1, inlet pipes 6a and 6b and exhaust pipe 2 are respectively heated with an embedded heater 13, the valves 18a and 18b are simultaneously opened, and a polyimide film is formed on the entire surface of the material.

In the deposition apparatus described in **JP '536**, as described in claim 1, the evaporated monomers are introduced into the chamber, and the polyimide film, for example, is formed omnidirectionally and simultaneously on the entire surface of the work piece. Therefore,

according to the apparatus described in JP '536, the problem as described on page 3, line 13 to page 4, line 3 of the specification of the instant application, that is, the problem that the deposition of the depositing material to the magnet is only one direction due to the apparatus structure (on page 3, lines 15 to 17), does not originally exist. Thus, a person skilled in the art would not be motivated to combine Pletscher with JP '536.

Even if a person skilled in the art were to combine Pletscher with JP '536, it is impossible for the apparatus described in JP '536 to deposit material to the work piece accommodated in the inside of the tubular barrel, as in the present invention. The apparatus described in JP '536 is used for forming an organic film such as a polyimide film, and the purpose is to be achieved when the entire inside of the apparatus is heated to about 200 °C (see paragraph 0020 in the specification of JP '536). However, because the depositing material in this invention is an inorganic substance such as a metal, the melting point is much higher than 500 °C. In order to make such a depositing material reach the work piece in the evaporated state by using the apparatus described in JP '536, at least the entire inside of the apparatus has to be maintained at such a high temperature. However, it is impossible to maintain the entire inside of the apparatus at such a high temperature by depending on the heater embedded in the peripheral wall of the apparatus described in JP '536. Even if it were possible, the depositing material deposited to the work piece would be melted on the surface of the work piece in this case, and if the work piece is a rare earth metal-based permanent magnet and is exposed to a temperature

higher than 500 °C, the magnetic characteristic deteriorates. In the apparatus of the present invention, because the evaporating section for a depositing material is located in the lower region of the tubular barrel, and the depositing material evaporated in the evaporating section naturally moves upward by convection, it is unnecessary to heat the work piece accommodated in the inside of the tubular barrel to over 500 °C. Therefore, the above-mentioned problem does not exist. Thus, in either case, even if a person skilled in the art would combine Pletscher with JP '536, it would be impossible to attain the present invention.

Accordingly, claims 2, 7 and 9 have been amended to clarify the claimed invention, and the 35 USC §103(a) rejection should be withdrawn.

In view of the aforementioned amendments and accompanying remarks, claims 2-20, 23, 25-26 and 28, as amended, are in condition for allowance, which action, at an early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

U.S. Patent Application Serial No. 09/901,044
Response to Office Action dated December 16, 2004

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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Enclosures: Petition for Extension of Time

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